

TECHNICAL REPORT  
Pregnancy/Postpartum Physical Training (PPPT) for Remote Soldiers  
Health Promotion and Prevention Initiatives (HPPI) Program

**Abstract**

Soldiers who are pregnant or who have recently experienced a pregnancy may face many challenges with regards to physical training. As postpartum Soldiers resume physical training and work to lose weight gained during pregnancy, they often find it difficult to pass the Army Physical Fitness Test (APFT) and meet height/weight standards after their pregnancy. The purpose of this HPPI project was to implement the Remote Soldier component of the PPPT Program and collect outcomes data.

Several important outcomes were identified through this project. The Remote Soldier PPPT Coordinator (Chief, Physical Therapy) provided an unexpected benefit of an on-post medical resource for Soldiers who relied on the civilian healthcare sector for pregnancy medical care. Preliminary findings indicate that the individual counseling sessions were valuable for Soldiers. However, provision of the Remote Soldier program resources alone was not sufficient to produce Soldier compliance with a sustained physical training regimen during pregnancy and postpartum.

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**Project detail**

**Background:** The intent of the USACHPPM-developed Soldier PPPT Program is to affect force readiness and morale by providing a safe, standardized physical training program to help Soldiers maintain fitness during pregnancy and to improve fitness postpartum. The objective of PPPT is to improve the number of Soldiers that meet AR 600-9 height/weight standards and pass their Army Physical Fitness Test within 180 days after delivery. Remote Soldier PPPT materials were developed to specifically address the requirements of individual Soldier physical training (PT) at remote locations. This project implemented the Remote Soldier component at an installation that did not have a formal PPPT Program.

**Impact on Soldier Readiness:** Ultimately, a Soldier who cannot pass the APFT or meet height/weight standards may have difficulty completing mission requirements. In addition, the ability to meet required Army standards impacts Soldier retention. These readiness issues result in decreased unit morale and a loss of time, money, and efficiency for the Army. The Soldier, the family and the unit all benefit when female Soldiers have the fitness levels and skills necessary to pass the APFT and height/weight standards as soon as possible after delivery.

**Methods:** The project was implemented through the Physical Therapy Clinic. Healthcare providers referred pregnant Soldiers to Physical Therapy when they received a pregnancy profile from the Army Health Clinic. Soldiers received individual counseling from the Chief of Physical Therapy. The counseling included exercises, precautions, contraindications, managing common musculoskeletal complaints, progression of exercises and post-partum return to activity. The

Soldiers were given written materials which reinforced the verbal counseling, videotapes of suggested exercise plans, and personal exercise equipment. Soldiers voluntarily presented to the Physical Therapy Clinic for their counseling sessions and were followed up at three-month intervals throughout pregnancy and at three- and six-months postpartum. Soldiers could also request additional counseling as needed for exercise progression.

**Innovative project aspects:** Coordinating the Remote Soldier PPPT Program through the Physical Therapist provided an on-site medical resource person for Soldiers that were required to obtain their pregnancy care in the civilian healthcare sector.

**Data limitations:** The total number of participants was small.

**Data analysis:** Analysis of data is pending completion of data collection.

**Implementation site:** Aberdeen Proving Ground (APG); HPPI FY05 project

### **Preliminary findings**

- Self-motivation is a critical success factor for sustained adherence to a PT program in the absence of mandated PT time during regular duty hours.
- Significant challenges exist for Soldiers that must complete PT outside of regular duty hours.
- An installation medical resource person is very valuable for Soldiers who must rely on the civilian healthcare sector for pregnancy and postpartum care. This resource person can provide medical advice as appropriate, as well as a military perspective for pregnancy-related medical issues.
- Advantages of a formal, organized PPPT Program include mandatory attendance, provision of health education classes by subject matter experts, completion of PT during duty hours, and an esprit de corps that is not provided by the Remote Soldier component of PPPT.

### **Recommendations**

- Increased accountability by line leadership would impact adherence to PT during pregnancy. For example, holding leadership (1SGTs) accountable for postpartum Soldier APFT scores would motivate leadership to monitor and encourage Soldier physical fitness during pregnancy. Perhaps modified PT could be mandated by 1SGTs for pregnant Soldiers, with appropriate medical and safety guidance.
- Many Soldiers who participated in the Remote Soldier PPPT Program did not exercise during pregnancy, either due to risks associated with that pregnancy or to other factors. These Soldiers would benefit from a more gradual postpartum PT program. Perhaps these Soldiers should be instructed to begin with the at-home component included in the PPPT materials instead of with the more rigorous postpartum regimen which assumes a certain level of physical activity during pregnancy.
- Community partnerships should be used to provide resources and opportunities for pregnant and postpartum Soldiers who must exercise on their own or complete PT outside of duty hours.
- Since the duty day includes one hour of PT for each Soldier, pregnant Soldiers could be allowed to sign in and use the gym facilities for one hour during their eight hours of daily duty day.

### **Questions for further study**

- What was the unit physical training status of Soldiers before entering the PPPT Program (i.e., which running group was each Soldier a part of)? How did this status affect Remote Soldier PPPT Program outcomes?
  - What is the prevalence of Soldiers on permanent profile or above weight standards that become pregnant? How does prior profile status affect time required postpartum to pass the APFT and meet height/weight standards?
  - What is the impact of the PPPT Program on the prevalence of and number of medical visits related to musculoskeletal complaints? Was the prevalence of musculoskeletal complaints in this population related to lower exercise frequency by participants?
  - Are there differences in adherence to a PPPT Program between TRADOC versus Division sites? Since Soldiers are more likely to deploy from a FORSCOM installation, motivation to maintain physical fitness levels might be higher there than at a TRADOC installation.
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### **Project outcomes**

**Data collection:** Outcomes data was collected for: frequency of Soldier physical training while pregnant and postpartum; recall of the counseling information; and the Soldier's ability to return to Army physical fitness and height/weight standards after delivery. Data was collected directly from Soldiers through interviews and written questions, and from APFT results.

As of October 2005, there were 30 total counseling sessions among the program enrollment of 17. Of these enrollees, 4 dropped out of the program due to ETS, Chapter 8, or loss to follow up. In addition, 6 were considered as high risk pregnancy and could not engage in any PT during pregnancy. Of the remaining 7 Soldiers, 3 delivered; 2 of these Soldiers continued the counseling sessions because they have had trouble returning to activity (probably because of infrequent PT during pregnancy). Data collection is still pending for pre- and post-pregnancy APFT score comparison, average weight gain, exercise frequency during pregnancy/postpartum, and recall and retention of pregnancy counseling information.

**Other project observations:** Many Soldiers were overweight before receiving a pregnancy profile. Soldiers kept all counseling appointments, even though these appointments were voluntary.